

The black cylinder at left is an Aquaspace industrial filter used by a pharmaceutical manufacturing company to insure the purity of the water it uses in pharmaceutical processing. It is one of a line of filtration products, manufactured by American Water Corporation (AWC), Hollywood, Florida, that provide clear, safe, good-tasting water by removing all toxic contaminants, microbiological agents, chlorine and other water-processing substances used by utilities, unpleasant taste,

color and odor. AWC produces a wide range of filter systems to meet a variety of needs ranging from camping filters to high capacity units for communities in developing nations where the water is highly contaminated.

For example, there is the Gemini Minisoftener-Purifier, the white tank unit (above), which not only filters the water but also removes the minerals that make the water hard; the

Apollo Pocket Filter, the pen-like object at left in the same photo, which is used like a drinking straw; the Lunar, for camping (above right), the Carafe, for restaurants (near right) and, at far right, a new model for sinktop installation in home or office. There are also models such as Skylab, for undersink installation in the home, Spacecraft, a large capacity unit for restaurants and hotels, and a complete line of very large capacity commercial and industrial filters.

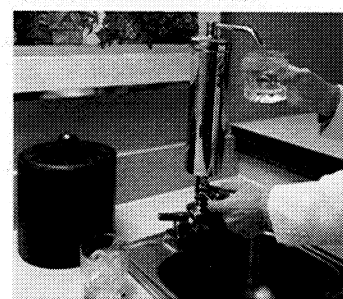
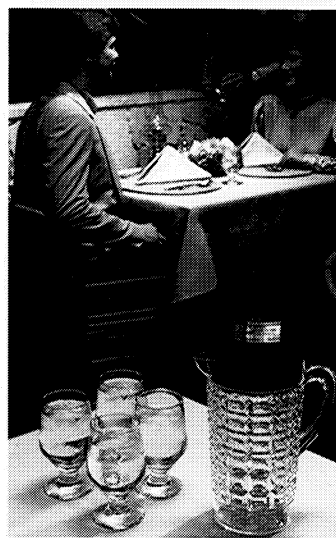
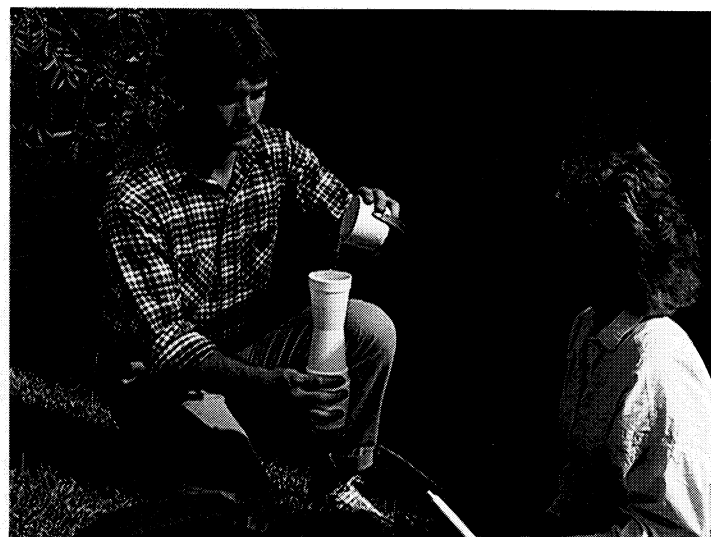
As the space-related names for many of the AWC products suggest, Aquaspace filters incorporate technology originally developed for manned space operations.

The key to the AWC filters is Aquaspace Compound, a proprietary AWC formula which, through a complex manufacturing process that the company keeps secret, scientifically blends various types of granular activated charcoal with other active and inert ingredients; a sample of the compound is shown in the large photo on the opposite page, the black substance in the small dish below the Gemini module. The systems remove some substances—chlorine, for example—by catalytic reaction, remove certain types of particulate matter by mechanical filtration, and still other substances—such as a suspension of organic vapor—by a combination of filtration and adsorption.

AWC's Dr. Ivo Pera began work in 1980 to find a more effective method of purifying potable water that was highly contaminated. His search of technical literature uncovered research accomplished by NASA concerning methods of on-board water purification in long duration manned spacecraft. Dr. Pera

obtained a number of NASA reports on these efforts; NASA information that proved especially useful, he says, was technology related to use of silver ions in water sterilization and methods dealing with the absorption and adsorption of organic compounds. The NASA technology contributed importantly to Dr. Pera's development of Aquaspace Compound, which is finding wide acceptance in industrial, commercial and recreational applications in the U.S. and many foreign countries.

With Aquaspace Compound a success, Dr. Pera turned his attention to a related environmental problem: odor control. Using the technology arising out of the original research, AWC developed a new line of products based on a deodorizing compound called Biofresh™. One Biofresh product, called Frigipure—for preserving food and removing odors in refrigerators—is shown in the upper left photo next to the dish of Aquaspace Compound. Biofresh compound is composed of millions of tiny sponge-like granules containing hundreds of small



holes that trap gas and moisture inside the unit. Biofresh has a lengthy list of applications; to mention just a few cited by AWC: animal rooms, bathrooms, chemical plants, physicians' offices, exhaust hoods, greenhouses, kitchens, soap factories, tanneries and any unventilated space. ▲

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All rights to Aquaspace were sold to Western Water International Incorporated, which is currently manufacturing Aquaspace water filter products in their Forestville, Maryland facility.